Claims:

1. A method for evoking and measuring response signals in a human patient, comprising:

providing a plurality of discrete stimulus signals to the human patient in a predetermined encoded sequence, each of said discrete stimulus signals selected to evoke at least one desired response signal in the human patient;

acquiring unfiltered signals from the human patient, said acquired unfiltered response signals including signal noise; and

utilizing said predetermined encoded sequence to extract said desired response signals from said acquired unfiltered response signals.

2. The method of Claim 1 for evoking and measuring response signals wherein each of said discrete stimulus signals are auditory signals.

3. The method of Claim 1 for evoking and measuring response signals wherein each of said discrete stimulus signals are visual signals.

4. The method of Claim 1 for evoking and measuring response signals wherein said predetermined sequence is encoded in a redundant encoding format.

5. The method of Claim 1 for evoking and measuring response signals wherein said predetermined sequence is encoded in a Hadamard encoding format.

6. The method of Claim 1 for evoking and measuring response signals wherein said at least one desired response signal is an auditory evoked signal.

7. The method of Claim 6 for evoking and measuring response signals wherein said at least one desired response signal is an auditory brainstem response signal.

8. The method of Claim 6 for evoking and measuring response signals wherein said at least one desired response signal is an otoacoustic auditory emission.

9. The method of Claim 1 for evoking and measuring response signals wherein said at least one desired response signal is a visually evoked bio-potential signal.

10. The method of Claim 1 for evoking and measuring response signals wherein said at least one desired response signal is a tactile evoked bio-potential signal.

11. A medical testing device for evoking and measuring response signals in a human patient, comprising:

a processing means, said processing means configured with a software application to generate at least one predetermined sequence of stimuli signals for evoking a response in a human patient;

a signal transmission means operatively coupled to said processing means, said signal transmission means configured to transmit said at least one sequence of stimuli signals to the human patient;

a signal receiving means operative coupled to said processing means, said signal receiving means configured to receive at least one unfiltered response signal from said human patient; and

wherein said processing means is further configure with a software application to process said received unfiltered response signal to extract a sequence

of evoked response signals associated with said at least one predetermined sequence of stimuli signals.

12. The medical testing device of Claim 11 wherein said signal transmission means is a microphone.

13. The medical testing device of Claim 11 wherein said signal transmission means is a light source.

14. The medical testing device of Claim 11 wherein said signal receiving means includes at least one microphone.

15. The medical testing device of Claim 11 wherein said signal receiving means includes at least one electrode.

16. The medical testing device of Claim 11 wherein said predetermined sequence of stimuli signals is an encoded sequence.